



Biology Overview

Term: Autumn
Year: 11
Teacher: Mrs Aziza Helaly
Textbook title: AQA GCSE Biology Oxford



What will we be covering this term?

1st Half Term:

Homeostasis in action: This chapter students will study homeostasis, starting with why and how the body controls its temperature. They should recall the role of the thermoregulatory centre in the brain and be able to describe the body's responses if the body temperature starts to become too high or too low.

Students should understand the role and functions of the human kidney, linking with work on diffusion, osmosis, and active transport in B1 *Cells and organisation*.

Finally, students have studied treatments for kidney failure. They should understand how dialysis works, and link this with earlier work on diffusion.

Human nervous system: By the end of this chapter, students will be able to describe an electrical impulse accurately. They will study the brain, linking each area with its function. They will also study the structure and function of the human eye and the process of accommodation.

2nd Half Term:

Organising and ecosystem: In this chapter students will study how feeding relationships are represented in food chains. They should understand the importance of photosynthesis in feeding relationships, linking with work in B8 *Photosynthesis*.

Students will look at mineral cycling and the microbes involved. They should understand how materials are recycled through the abiotic and biotic components of an ecosystem, and the importance of decay.

Finally, students will study the water cycle and should recall the main stages of condensation, precipitation, evaporation, transpiration, and respiration.

There will be an end of term exam based on what students have covered this half-term.



Teacher's Marking Key:

Mark code	Means
SP	Spelling error
//	New paragraph needed
Work underlined	Indicate a word or phrase does not make sense
?	Not clear. Rewrite this section again to improve the expression.
FS	Write in full sentences
EX	Develop your explanation further using scientific keywords.
D	You need to add more detail.
EBI	Even better if
www	What went well
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How will my child be assessed this term?

There will be at least 2 assessed pieces this term.

1st Assessment: Homeostasis in action & Human nervous system

2nd Assessment: Organising and ecosystem

At the end of the term there will summative exam that will test their knowledge for what they've covered during the course of the entire term.

How can I help my child in this subject?

- Ensure homework is complete; you can track students' homework assignments at <https://www.showmyhomework.co.uk>
- Encouragement, praise, ensuring that they do their homework; and checking their student planner.
- Encouraging them to read around the subject.
- Their notes must be in order; discipline is essential.

Resources

Useful Websites

For independent study the following websites are recommended:

- Maths skills in GCSE Biology: <https://www.my-gcsescience.com/maths-skills-gcse-biology/>
- AQA specification: <https://filestore.aqa.org.uk/resources/biology/specifications/AQA-8461-SP-2016.PDF>
- BBC Bitesize: http://www.bbc.co.uk/schools/gcsebitesize/science/add_aqa/
- Revision GCSE Biology: <http://www.gcsescience.com/pe.htm>
- Assessment resources: <https://www.aqa.org.uk/subjects/science/gcse/biology-8461/assessment-resources>
- GCSE exam questions organised by Topics & difficulty: <https://www.savemyexams.co.uk/gcse-biology-aqa/>



Communications

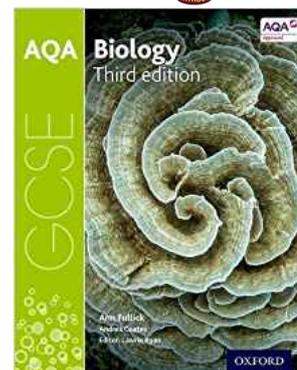
Who do I contact if I have concerns about my child's progress in this subject?

Please feel free to contact us at the school from 9.00-15:00 if you have any questions or concerns or contact me by email aziza.helaly@alkhairschool.org.uk.



Biology Overview

Term: Spring
Year: 11
Teacher: Mrs Aziza Helaly
Textbook title: AQA GCSE Chemistry Oxford



What will we be covering this term?

1st Half Term:

Variation and evolution: This chapter students will learn about the causes of variation in terms of genetic, environmental, or a combination of both. They should link environmental variation with the effect of alcohol on a fetus in B7.5 Alcohol and other carcinogens. In studying evolution by natural selection, students will study the role of mutation in variation, understand the theory of evolution by survival of the fittest and natural selection, and be able to give examples.

Biodiversity and ecosystems: In this chapter students have studied biodiversity and ecosystems, starting with the reasons for and the effects of the human population explosion. Students should understand the effect of different types of pollution including land, water, and air pollution. Students should be able to outline the processes of deforestation and peat destruction. Finally, students should be familiar with biotechnological methods of food production including the production of mycoprotein and the use of genetically modified organisms.

2nd Half Term:

Reproduction: In this chapter, students should link the sexual reproduction with work on chromosomes and mitosis and the cell cycle in B2 Cell division. Students should recall that fungi, plants, and malaria parasites are able to use both types of reproduction. They should be aware of the genetic code and genomes, including how the data produced by genome research can be used.

Variation and evolution: In studying genetic engineering, students should understand what is meant by the term, and be able to give examples of its use and consider the potential benefits and problems. Higher-tier students should be able to recall the steps involved in the process of genetic engineering. Finally, AQA GCSE Biology students have studied cloning as applied to both plants and animals. They should recall different ways of creating clones, and be able to describe why they are useful.

There will be an end of term exam based on what students have covered this half-term.



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How will my child be assessed this term?

There will be mock exams, these will include;

Biology Paper 1 - 1 hour 45 minutes

Biology Paper 2 - 1 hour 45 minutes

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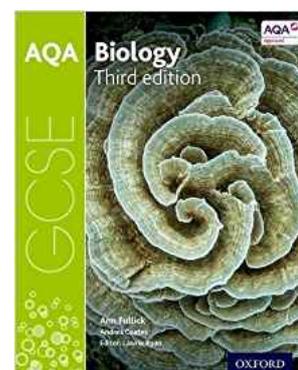
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Chemistry Overview

Term: Summer
Year: 11
Teacher: Mrs Aziza Helaly
Textbook title: AQA GCSE Biology Oxford:



What will we be covering this term?

During this term, pupils would be revising for their GCSE exams and practising past paper questions.

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